



Attorney Docket: 381KA/50358
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HIROSHI KANAZAWA ET AL.
Serial No.: 09/941,655 Group Art Unit: 2834
Filed: AUGUST 30, 2001 Examiner: Heba Elkassabgi
Title: VEHICULAR ALTERNATOR

RESPONSE TO OFFICE ACTION

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

August 26, 2003

Sir:

The following remarks are respectfully submitted in response to the Office Action dated March 27, 2003 regarding the above-identified U.S. patent application.

The drawings have been objected to under 37 CFR § 1.83(a) as allegedly failing to show every feature of the invention specified in the claims. In particular, the Office Action states that the limitation in Claims 1 and 7 that the permanent magnets have rectangular surfaces is not shown, because the drawing illustrates square surfaces.

In response to this ground of objection, Applicants note that this feature of the invention is shown in Figure 2 of the drawings, in which the lateral surface of the permanent magnet 7 is illustrated by a dashed line, and has a rectangular shape. Consistently, the specification states at page 13, lines 10-12, "The permanent magnet 7 is formed to have substantially rectangular lateral surfaces (i.e., magnetic pole surfaces) in the circumferential direction of the rotor 1 (left-and-right direction in Figure 3)." Accordingly, no amendment to the drawings is believed to be necessary to properly and fully illustrate the features of the invention recited in the claims, and reconsideration and withdrawal of this ground of objection are respectfully requested.

Claims 1 and 7 have been rejected under 35 USC §112, first paragraph on the ground that they contain subject matter that is not described in the specification in such a way as to reasonably convey to a person skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. The basis for this ground of rejection is the proposition, stated at the top of page 3, that the feature that the permanent magnets have rectangular lateral surfaces is not disclosed in the specification or shown in the drawings. However, as noted previously, the specification clearly states that the permanent magnet 7 "are formed to have substantially rectangular lateral surfaces". Moreover, as noted previously, this feature of the invention is clearly shown in Figure 2. Accordingly, Applicants respectfully traverse this ground of rejection.

Claims 1-6 and 9 have been rejected under 35 USC §102(b) as anticipated by Kusase et al (U.S. Patent No. 5,483,116), while Claims 7 and 8 have been rejected under 35 USC §103(a) as unpatentable over Kusase et al and further in view of Ragaly (JP 411285214A). However, for the reasons set forth hereinafter, Applicants respectfully submit that Claims 1-9 as currently pending in this application distinguish over the cited references, whether considered separately or in combination.

In particular, neither Kusase et al nor Ragaly discloses the feature of the invention, recited in both Claims 1 and 7 that the claws are "in contact with the whole of the magnet pole surfaces of said permanent magnet." Moreover, neither of the cited references discloses that the opposing surfaces of the claws adjacent the permanent magnets are formed into substantially the same shape as the magnetic pole surfaces with which they are in contact, as recited in Claim 1. The latter features of the invention are disclosed at page 12, lines 18-23 and page 13, lines 23-28 of the specification.

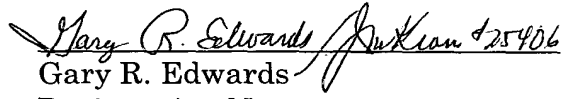
Neither of these features is to be found in the Kusase et al apparatus. For example, referring to Figure 1, it is apparent that each of the "claw-like magnetic poles 15 and 16 (Column 5, lines 21-22) has a tapered, substantially triangular cross-section, as indicated by the dashed line in Figure 1. On the other hand, the permanent magnetic 11 clearly has a substantially rectangular cross section. It is therefore apparent that a portion of the magnet 11 in Kusase et al does not

come into contact with the surface of the adjacent claw, which is contrary to the recitation in both Claims 1 and 7. Moreover, as noted in Applicants' remarks which accompanied the amendment submitted January 23, 2003, Figure 3 of Kusase et al is a cross section taken at an unspecified plane in Figure 1, and shows nothing about the shape of the latter surfaces of either the magnets 11 or the respective claw-like magnetic poles 15 and 16. As also noted previously, since both of the poles 15 and 16 have a tapered triangular shape, as indicated in Figure 1, it is apparent that the two will have the same size and shape only when the section plane is located axially at the center of the rotor in Figure 1. The important point, however, is that nothing contained in either Figure 3 or anywhere else in the disclosure in Kusase et al teaches or suggests the provision of claw-type magnetic poles in which the opposing surfaces of the claws adjacent the permanent magnets are formed into substantially the same shape as the magnetic pole surfaces with which they are in contact, or that the claws are in contact with the whole of the magnet pole surfaces of the permanent magnets. Accordingly, Claims 1 and 7 distinguish over Kusase et al and Ragaly.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees, be charged, or any overpayment in fees be credited, to the Deposit Account of Crowell & Moring LLP, Account No. 05-1323 (Docket #381KA/50358).

Respectfully submitted,


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